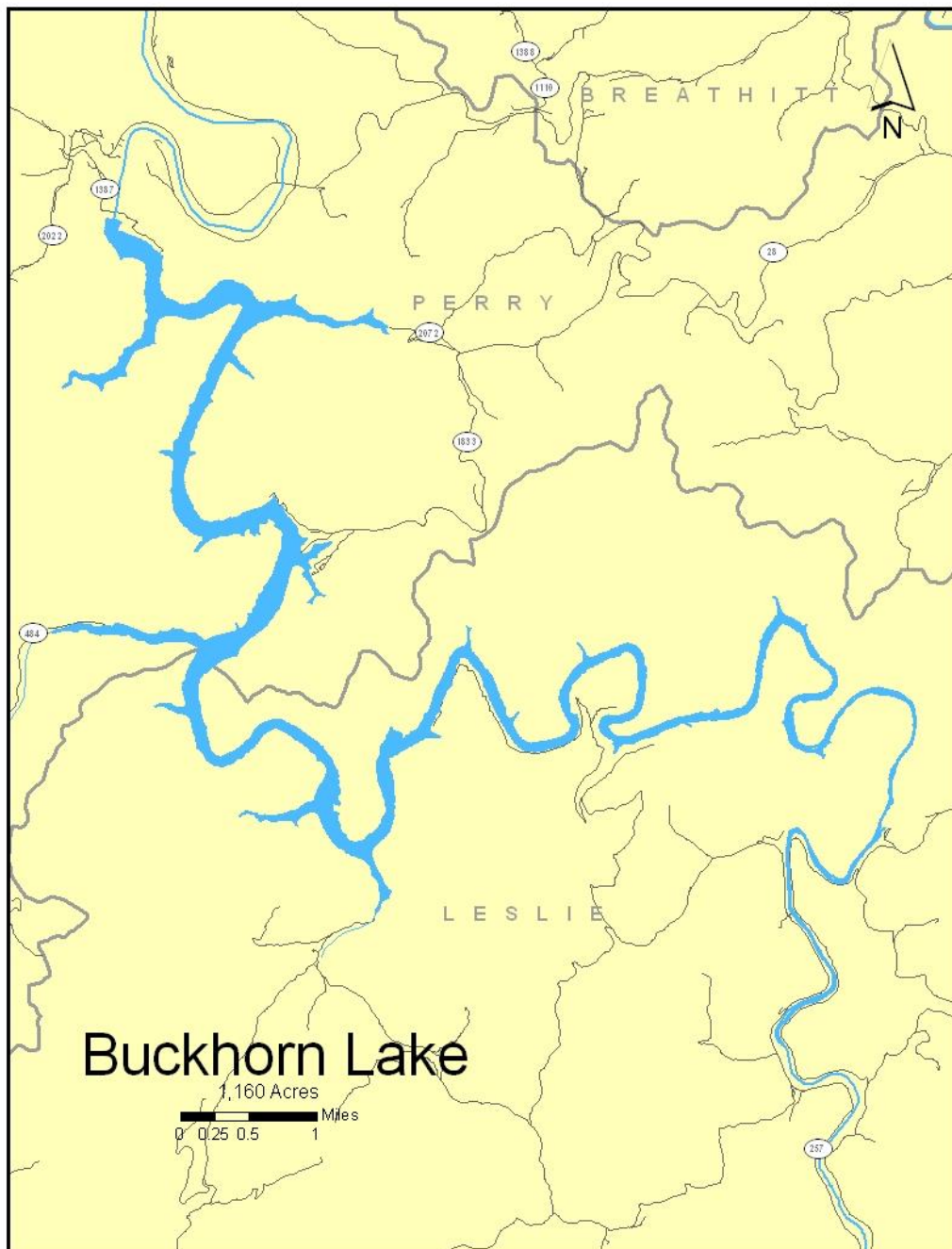


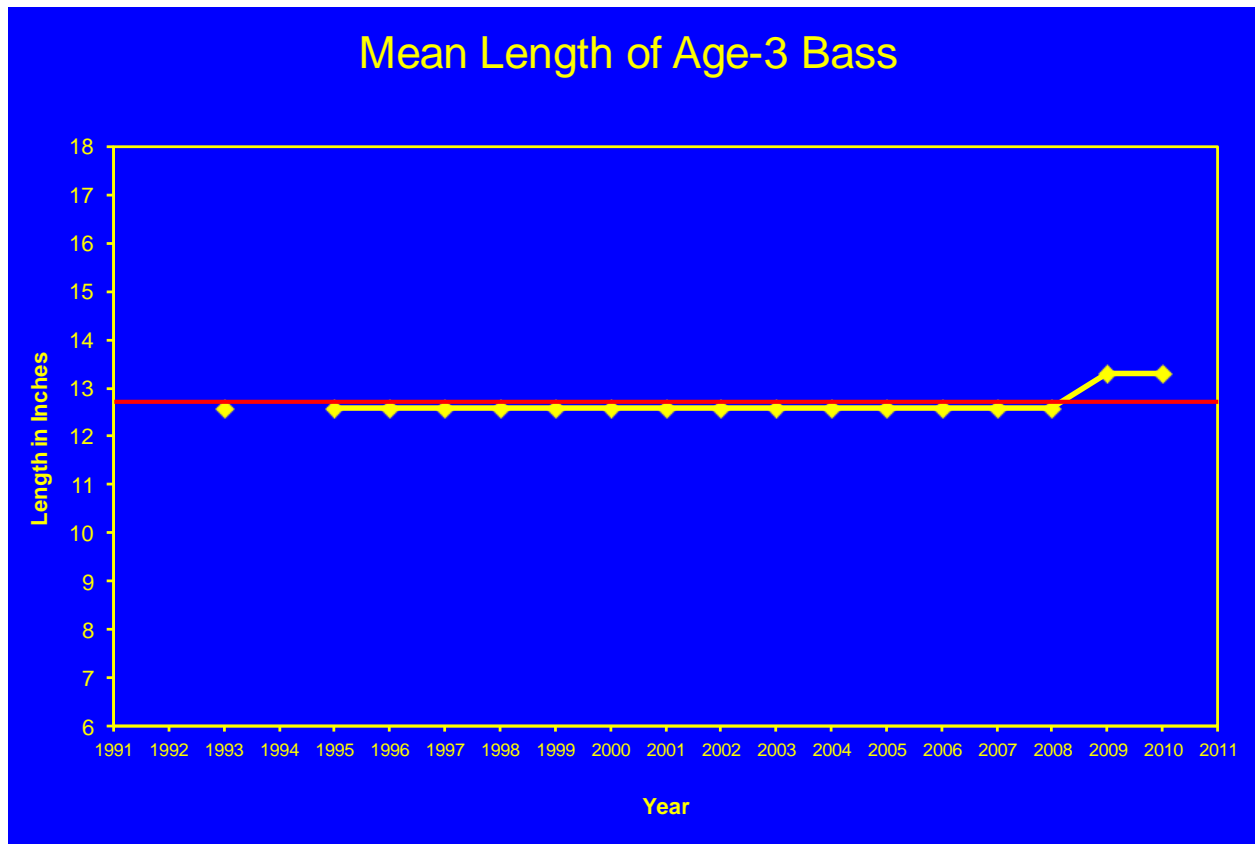
Buckhorn Lake Bass Assessment 2011

Buckhorn Lake, located in Leslie and Perry Counties, is a 1,230 acre multipurpose reservoir on the Middle Fork of the Kentucky River. Buckhorn is one of three lakes in Kentucky that provide the opportunity to catch muskellunge. Buckhorn Lake is also popular for largemouth bass, white crappie, bluegill, channel catfish, and flathead catfish. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment. Please see “Understanding The Largemouth Bass Assessment” article for an explanation of how the assessment works. *Please note that the minimum size limit for largemouth bass on this lake is 15.0 inches.*



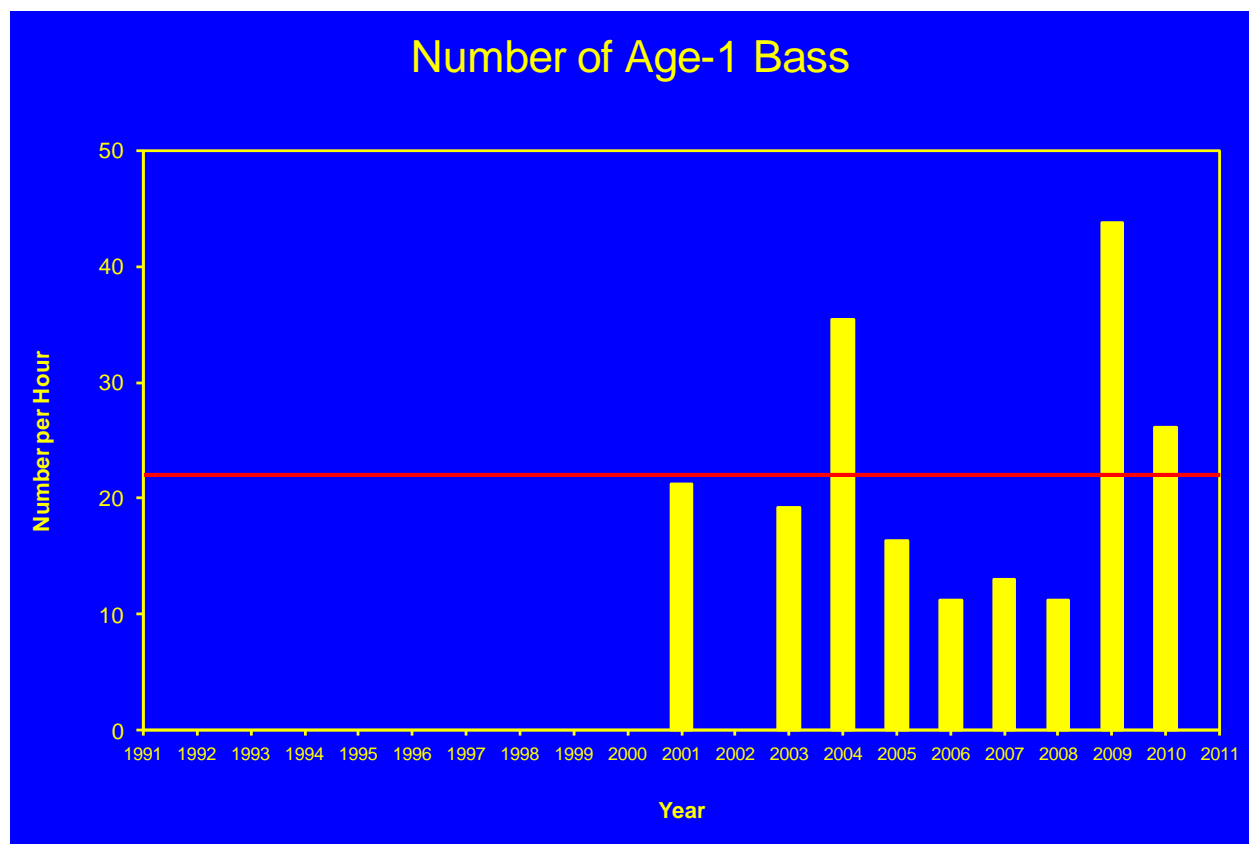
Parameter 1 – Length at age-3 (growth rate)

At Buckhorn Lake, the length of an age-3 largemouth bass has averaged just above 12.7 inches over the past 18 years (see red line). Compared to other reservoirs of similar size, largemouth bass generally exhibit excellent growth at Buckhorn Lake. Growth rates can be variable and are generally related to factors such as population density, food resources, and weather patterns. The most recent aging of largemouth bass at Buckhorn Lake was in 2009 and found that 3 year old largemouth experienced excellent growth, averaging 13.3 inches.



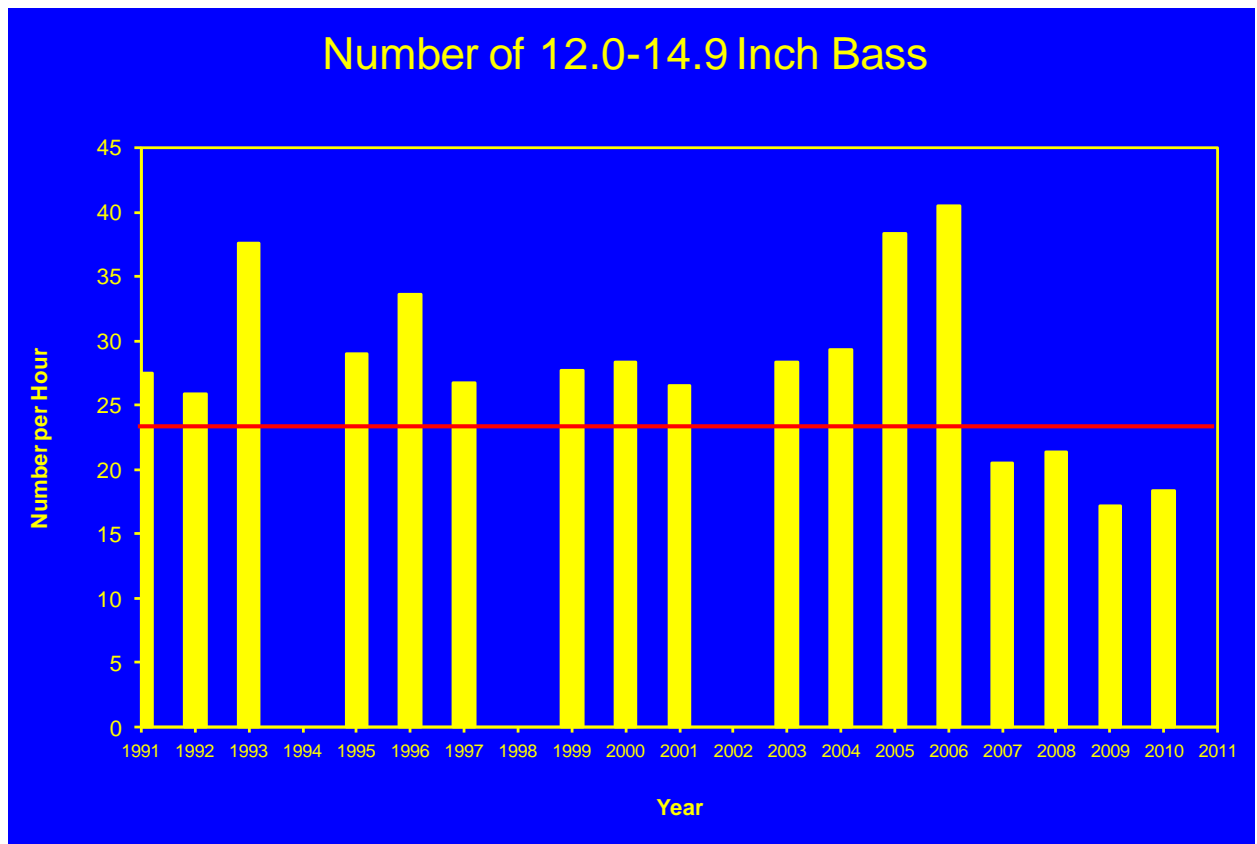
Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the spring catch rates of age-1 largemouth bass to assess the success of the spawn which occurred in the prior year. This is an important parameter because the number of age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Buckhorn Lake, the combined catch rate of wild and stocked age-1 largemouth bass averaged 21.95 fish per hour of electrofishing since 2001 which is considered “fair” compared to similar sized lakes. Age-1 catch rates were up in 2009 and 2010 at 43.76 (“good”) and 26.10 (“fair”) fish per hour, respectively. Age-0 largemouth bass stockings in the fall of 2008 and 2009 are largely responsible for the strong year classes observed in 2009-2010.



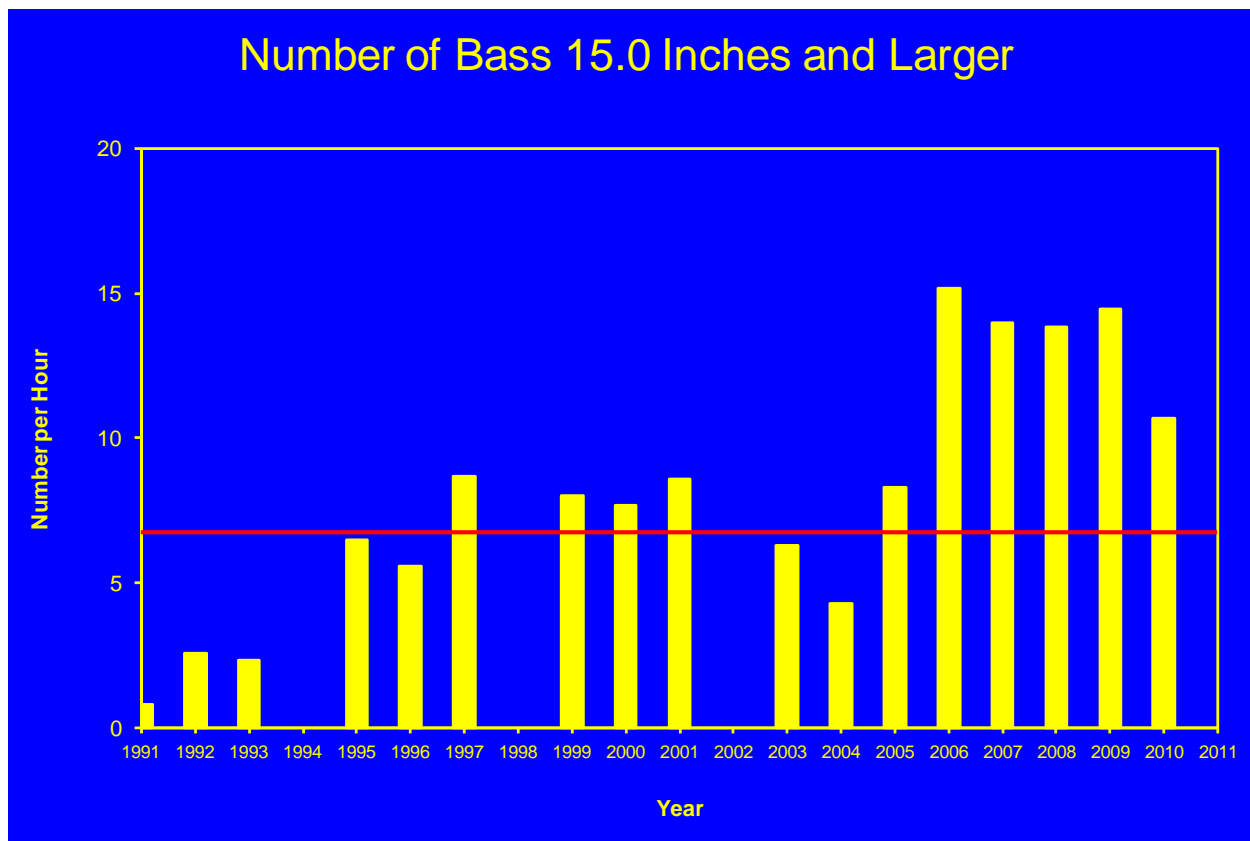
Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch of 12.0-14.9 inch largemouth bass has averaged 23.68 fish per hour over the past 25 years as indicated by the red line. As compared to other lakes, this is a “fair” catch rate for this size group of bass. Below average catch rates of this size group have been experienced for the past four years averaging 19.34 fish per hour which is still considered “fair.” The numbers of 12.0-14.9 inch largemouth bass will likely increase over the next couple years as the strong 2008 and 2009 year classes grow. This number is important because these fish will soon grow to exceed the 15.0 inch legal size limit at the lake, and is a good predictor how bass fishing will be in years to come.



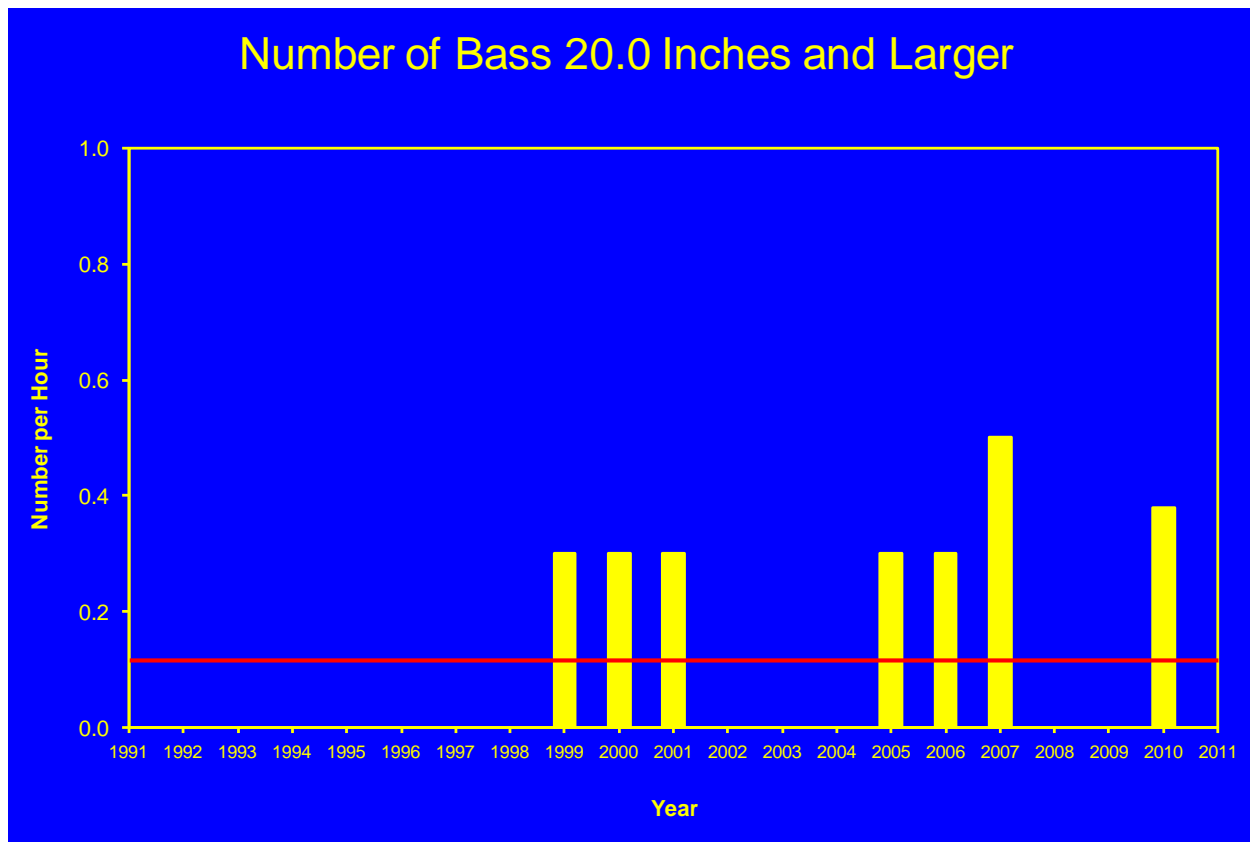
Parameter 4 – Numbers of 15 inch and larger bass

The catch rate of 15.0 inch and larger largemouth bass at Buckhorn Lake has averaged 6.60 fish per hour of electrofishing since 1986 (red line). Again, as compared to other lakes, this is a “fair” catch rate for this size group. The past five years, however, has seen an increased average of 13.63 fish per hour (“good”). This catch rate may fall slightly over the next couple years as numbers of 12.0-14.9 in fish have been down the past four years, but should increase again as the 2008 and 2009 year classes grow.



Parameter 5 – Numbers of 20-inch and larger bass

The electrofishing catch of 20.0 inch and larger largemouth bass has averaged about 0.11 fish per hour at Buckhorn Lake since 1986. This catch rate is considered “poor” when compared to other lakes of this size. While no fish 20.0 inches and larger were found in 2008-2009, a catch rate of 0.38 fish per hour (“fair”) was observed in 2010. Thus, an angler fishing in Buckhorn Lake would have a better chance of catching several quality size bass than a genuine trophy. Even so, there are some big fish out there and that occasional trophy largemouth cannot be completely ruled out.



Overall – Total Assessment Score (All five parameters added together)

Overall, the largemouth bass fishery at Buckhorn Lake has averaged a “fair” rating over the past 10 years. The overall assessment score for the largemouth bass population at Buckhorn Lake has bounced back and forth between fair and good in the past settling out at the lower end of the “good” range (12) for the past two years. While it is not expected to reach the excellent range in the near future, it may increase towards the upper end of the good range over the next few years, as a couple strong year classes continue to grow.

